

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application. Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

## Listing of Claims:

1. (Currently amended) ~~A~~ At least one computer-readable media having instructions stored thereon for generating a database operator that selects a subset of a plurality of database objects having associated attributes, the database operator comprising:

a partial order specification module that receives a workload, the workload including a plurality of database objects, wherein the ~~inputs a partial order specification module determines a first subset of criterion for an attribute whereby a master database objects and a second subset of database objects in the plurality of database objects of the workload, the first subset of database objects comprising database objects that dominate at least one database object in the second subset of object in the plurality dominates an associated slave database objects~~ object; and

a database object subset selection module that generates a summarized workload by:

determining a third subset of ~~applies the partial order criterion to the database objects within the second subset of object attributes and eliminates all slave database objects that do not dominate at least one their associated master database object~~ in the first subset of database objects;

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combining the first subset of database objects and the third subset of database objects to generate the summarized workload;  
outputting the summarized workload from the subset.

2. (Currently amended) The ~~database operator~~ computer-readable media of claim 1 ~~wherein the database operator further comprises~~ comprising a partitioning module that partitions the database objects into partitions based on a partitioning attribute; wherein database objects in the partition have equivalent values for the partitioning attribute and wherein the subset selection module applies the partial order separately for each partition.
3. (Currently amended) The ~~database operator~~ computer-readable media of claim 1 ~~wherein the database operator further comprises~~ comprising a dominance aggregation module that, for a master database object, aggregates information about slave database objects that the master database object dominates.
4. (Currently amended) The ~~database operator~~ computer-readable media of claim 3 wherein information about a slave database object is distributed between two master database objects that dominate the slave object.
5. (Currently amended) The ~~database operator~~ computer-readable media of claim 1 wherein the database objects are database statements from a database workload presented according to a workload schema.

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6. (Currently amended) The ~~database operator~~ computer-readable media of claim 1 wherein when a slave database object dominates the associated master database object, one of either the slave or master database objects is eliminated from the subset.

7. (Currently amended) The ~~database operator~~ computer-readable media of claim 1 wherein the partial order criterion comprises a conjunction of one or more transitive inequality conditions.

8. (Currently amended) The ~~database operator~~ computer-readable media of claim 2 wherein the partitioning module hashes database objects on the partitioning attribute.

9. (Currently amended) A method that selects a subset of database objects from a plurality of database objects having associated attributes comprising:

accessing two or more database objects from the plurality of database objects;

inputting a partial order criterion for at least one attribute by which a master database object dominates a slave associated with the two or more database object objects;

applying the partial order criteria to the two or more database objects to identify at least one master database object, the at least one master database object dominating at least one other database object in the plurality of database objects; and

identifying a subset of master database objects that are dominated by at least one other database object in the plurality of database objects;

generating a subset of database objects including the identified master database objects dominating at least one other database object in the plurality of database objects minus the subset of master database objects that are dominated by at

least one other database object in the plurality of database objects including any master database objects that are not dominated by any other database object to the subset; and outputting the generated subset of database objects.

10. (Original) The method of claim 9 comprising partitioning the plurality of database objects into partitions based on a partitioning attribute such that database objects in the partition have equivalent values for the partitioning attribute and wherein the partial order criteria is applied separately to database objects in each partition.
11. (Original) The method of claim 9 comprising aggregating information about slave database objects that are dominated by an associated master database object and are not included in the subset.
12. (Original) The method of claim 9 comprising selecting one of two database objects for inclusion in the subset if each of the two database objects dominates the other.
13. (Original) The method of claim 10 comprising hashing the database objects on the partitioning attribute.
14. (Original) One or more computer-readable media comprising computer executable instructions for performing the method of claim 9.
15. (Currently amended) One or more computer readable media having computer-executable instructions stored thereon for selecting a subset of a plurality of database objects having associated attributes, the instructions comprising:

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inputting a partial order criterion for an attribute whereby to determine a master database object in the plurality of database objects that dominates at least one  
~~an~~ associated slave database object in the plurality of database objects; and

applying the partial order criterion to the database object attributes to identify a first subset of database objects and a second subset of database objects in the plurality of database objects, the first subset including master database objects and the second subset including associated slave database objects; and

eliminating all slave database objects that do not dominate their associated master database object from the second subset to obtain a modified second subset of database objects;

generating a third subset of the plurality of database objects including the first subset of database objects and the modified second subset of database objects;  
 and

outputting the third subset of the plurality of database objects.

16. (Original) The computer readable media of claim 15 wherein the instructions comprise partitioning the database objects into partitions based on a partitioning attribute; wherein database objects in the partition have equivalent values for the partitioning attribute and wherein the filtering module applies the partial order separately for each partition.

17. (Original) The computer readable media of claim 15 wherein the instructions comprise aggregating information about slave database objects that the master database object dominates.

18. (Original) The computer readable media of claim 17 wherein the information about a slave database object is distributed between two master database objects that dominate the slave object.

19. (Original) The computer readable media of claim 15 wherein the database objects are database statements from a database workload presented according to a workload schema.

20. (Original) The computer readable media of claim 15 wherein when a slave database object dominates the associated master database object, one of either the slave or master database objects is eliminated from the subset.

21. (Original) The computer readable media of claim 15 wherein the partial order criterion comprises a conjunction of one or more transitive inequality conditions.

22. (Original) The computer readable media of claim 16 wherein the instructions comprise hashing the database objects on the partitioning attribute.

23. (Currently amended) An apparatus for selecting a subset of database objects from a plurality of database objects having associated attributes comprising:

at least one processor;

means a component for accessing two or more database objects from the plurality of database objects;

means a component for inputting a partial order criterion for at least one attribute ~~by which a master database object dominates a slave~~ associated with the two or more database object objects;

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means a component for applying the partial order criteria to the two or more database objects to identify at least one master database object, the at least one master database object dominating at least one other database object in the plurality of database objects; and

means a component for identifying a subset of master database objects that are dominated by at least one other database object in the plurality of database objects;

a component for generating a subset of database objects including the identified master database objects dominating at least one other database object in the plurality of database objects minus the subset of master database objects that are dominated by at least one other database object in the plurality of database objects including any master database objects that are not dominated by any other database object to the subset; and

a component for outputting the generated subset of database objects.

24. (Currently amended) The apparatus of claim 23 comprising means a component for partitioning the plurality of database objects into partitions based on a partitioning attribute such that database objects in the partition have equivalent values for the partitioning attribute and wherein the means for applying the partial order criteria applies the criteria separately to database objects in each partition.

25. (Currently amended) The apparatus of claim 23 comprising means a component for aggregating information about slave database objects that are dominated by an associated master database object and are not included in the subset.

26. (Currently amended) The apparatus of claim 23 comprising ~~means~~ a component for selecting one of two database objects for inclusion in the subset if each of the two database objects dominates the other.

27. (Currently amended) The apparatus of claim 24 comprising ~~means~~ a component for hashing the database objects on the partitioning attribute.

28-93 (Canceled).

94. (New) The computer-readable media of claim 1 wherein the plurality of database objects includes queries.

95. (New) The computer-readable media of claim 94 wherein the first subset of database objects includes a first query associated with a first condition and a second condition and the second subset of database objects includes a second query associated with the first condition.

96. (New) The computer-readable media of claim 95 wherein the second query is not associated with the second condition.

97. (New) The computer-readable media of claim 1 wherein attributes of the database objects are associated with at least one partial order condition.

98. (New) The computer-readable media of claim 97 wherein a partial order condition of a database object in the first plurality of database objects is a subset of a partial order condition of a database object in the second plurality of database objects.

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99. (New) The computer-readable media of claim 98 wherein the partial order condition of the database object in the first plurality of database objects and the database object in the second plurality of database objects include a grouping of attributes.

100. (New) The computer-readable media of claim 99 wherein each of the attributes in the grouping of attributes of the database object in the second plurality of database objects is included in the grouping of attributes of the database object in the first plurality of database objects.

101. (New) The computer-readable media of claim 100 wherein at least one attribute in the grouping of attributes of the database object in the first plurality of database objects is not included in the attributes in the grouping of attributes of database object in the second plurality of database objects.

102. (New) The computer-readable media of claim 97 wherein a partial order condition of a database object in the first plurality of database objects is a prefix of a partial order condition of a database object in the second plurality of database objects.

103. (New) The computer-readable media of claim 102 the partial order condition associated with the database object in the first plurality of database objects includes an ordering of statements based on attributes associated with the database object in the first plurality of database objects and the partial order condition associated with database object in the second plurality of database objects includes an ordering of

statements based on attributes associated with the database object in the second plurality of database objects.

104. (New) The computer-readable media of claim 102 wherein each of the partial order conditions includes an ordering of statements based on attributes associated with the corresponding database object.

105. (New) The computer-readable media of claim 104 wherein each of the attributes associated with the database object in the second plurality of database objects is included in the attributes associated with the database object in the first plurality of database objects.

106. (New) The computer-readable media of claim 105 wherein at least one attribute associated with the database object in the first plurality of database objects is not included in the attributes associated with the database object in the second plurality of database objects.

107. (New) The method of claim 9 wherein the step of applying comprises:  
     identifying the at least one master database object based on a condition based on attributes of the at least one master database object; and  
     identifying the at least one other database object in the plurality of database objects, wherein the at least one other database object in the plurality of database objects includes a condition based on at least one attribute.

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108. (New) The method of claim 107 wherein the condition associated with the at least one master database object comprises a subset of the condition associated with the at least one other database object in the plurality of database objects.

109. (New) The method of claim 107 wherein each of the at least one attributes associated with the condition of the at least one other database object is included in the attributes of the at least one master database object.

110. (New) The method of claim 109 wherein at least one attribute of the at least one master database object is not included in the at least one attribute associated with the condition of the at least one other database object.

111. (New) The method of claim 107 wherein the condition associated with the at least one master database object is a prefix of the condition associated with the at least one other database object in the plurality of database objects.

112. (New) The method of claim 110 wherein the condition includes an ordering of the database objects.

113. (New) The method of claim 112 wherein ordering of the master database object is based on a first plurality of attributes and ordering of the at least one other database object is based on at least one attribute.

114. (New) The method of claim 112 wherein a subset of the plurality of attributes of the master database object includes each of the at least one attribute of the at least one other database object in the plurality of database objects.

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115. (New) The method of claim 114 wherein at least one attribute in the plurality of attributes of the master database object is not included in the at least one attribute of the at least one other database object in the plurality of database objects.

116. (New) The computer readable media of claim 15 wherein the step of applying comprises:

identifying the at least one master database object based on a condition based on attributes of the at least one master database object; and

identifying the at least one associated slave database object in the plurality of database objects, wherein the at least one associated slave database object in the plurality of database objects includes a condition based on at least one attribute.

117. (New) The method of claim 116 wherein the condition associated with the at least one master database object comprises a subset of the condition associated with the at least one associated slave database object in the plurality of database objects.

118. (New) The method of claim 116 wherein the condition associated with the at least one master database object is a prefix of the condition associated with the at least one associated slave database object in the plurality of database objects.

119. (New) The method of claim 116 wherein each of the at least one attributes associated with the condition of the at least one associated slave database object is included in the attributes of the at least one master database object.

120. (New) The method of claim 119 wherein at least one attribute of the at least one master database object is not included in the at least one attribute associated with the condition of the at least one associated slave database object.

121. (New) The method of claim 120 wherein the condition includes an ordering of the database objects.

122. (New) The method of claim 121 wherein ordering of the master database object is based on a first plurality of attributes and ordering of the at least one associated slave database object is based on at least one attribute.

123. (New) The method of claim 121 wherein a subset of the plurality of attributes of the master database object includes each of the at least one attribute of the at least one associated slave database object in the plurality of database objects.

124. (New) The method of claim 123 wherein at least one attribute in the plurality of attributes of the master database object is not included in the at least one attribute of the at least one associated slave database object in the plurality of database objects.

125. (New) The apparatus of claim 23 wherein the component for applying further identifies the at least one master database object based on a condition based on attributes of the at least one master database object and identifies the at least one associated slave database object in the plurality of database objects, and wherein the at least one associated slave database object in the plurality of database objects includes a condition based on at least one attribute.

126. (New) The apparatus of claim 125 wherein the condition associated with the at least one master database object comprises a subset of the condition associated with the at least one associated slave database object in the plurality of database objects.

127. (New) The apparatus of claim 125 wherein the condition associated with the at least one master database object is a prefix of the condition associated with the at least one associated slave database object in the plurality of database objects.

128. (New) The apparatus of claim 125 wherein each of the at least one attribute associated with the condition of the at least one associated slave database object is included in the attributes of the at least one master database object.

129. (New) The apparatus of claim 128 wherein at least one attribute of the at least one master database object is not included in the at least one attribute associated with the condition of the at least one associated slave database object.

130. (New) The apparatus of claim 129 wherein the condition includes an ordering of the database objects.

131. (New) The apparatus of claim 130 wherein ordering of the master database object is based on a first plurality of attributes and ordering of the at least one associated slave database object is based on at least one attribute.

132. (New) The apparatus of claim 130 wherein a subset of the plurality of attributes of the master database object includes each of the at least one attribute of the at least one associated slave database object in the plurality of database objects.

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133. (New) The apparatus of claim 132 wherein at least one attribute in the plurality of attributes of the master database object is not included in the at least one attribute of the at least one associated slave database object in the plurality of database objects.

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